

What is claimed is:

1. A signal receiving system comprising:
  - a variable directivity antenna having its directivity varied in  
5 accordance with a control signal applied thereto;
  - a control signal generator for generating said control signal;
  - a modulator for modulating a carrier with said control signal from  
said control signal generator and developing a modulated signal; and
  - a controller for demodulating said modulated signal to recover said  
10 control signal from said modulated signal and applying said recovered control  
signal to said variable directivity antenna.
2. The signal receiving system according to Claim 1 wherein said  
modulator ASK modulates said carrier with said control signal.
- 15 3. The signal receiving system according to Claim 1 wherein said  
variable directivity antenna is coupled to a receiving apparatus through a  
transmission line, and said receiving apparatus includes therein said  
modulator and said control signal generator, said transmission line  
20 transmitting a signal received by said variable directivity antenna to said  
receiving apparatus and transmitting said modulated signal from said receiving  
apparatus to said variable directivity antenna.
4. The signal receiving system according to Claim 1 wherein said  
25 variable directivity antenna is coupled to a receiving apparatus through a  
transmission line, and said modulator is external to said receiving apparatus,  
said transmission line transmitting a signal received by said variable directivity  
antenna to said receiving apparatus and transmitting said modulated signal  
from said modulator to said variable directivity antenna.

5. The signal receiving system according to Claim 1 wherein said variable directivity antenna is adapted to receive a signal received by a separate antenna, and is provided with combining means for combining said signal received by said separate antenna with a signal received by said variable directivity antenna, an output signal of said combining means being coupled to a receiving apparatus through a transmission line.

6. The signal receiving system according to Claim 1 wherein said variable directivity antenna comprises: two directional antennas disposed in such a manner that their directivities can be orthogonal to each other; and two level adjusting means to which signals received by respective ones of said two directional antennas are applied, respectively; said level adjusting means being controlled with said control signal.

7. The signal receiving system according to Claim 1 wherein:  
said variable directivity antenna is coupled to a receiving apparatus through a transmission line; and  
said receiving apparatus comprises:  
signal receiving condition detecting means for detecting a condition in which a desired signal is being received; and  
receiving apparatus control means for, when the signal receiving condition becomes unacceptable, changing said control signal to be supplied to said modulator from said control signal generator, and providing, to said modulator, the current control signal being supplied when the signal receiving condition as detected by said signal receiving condition detecting means becomes acceptable.